ELEC 71AL Course Outline as of Fall 1997

CATALOG INFORMATION

Dept and Nbr: ELEC 71AL Title: ELECT DEVICES LAB
Full Title: Electronic Devices Lab
Last Reviewed: 5/12/2008

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	2.00	Lecture Scheduled	1.00	17.5	Lecture Scheduled	17.50
Minimum	2.00	Lab Scheduled	2.00	17.5	Lab Scheduled	35.00
		Contact DHR	1.00		Contact DHR	17.50
		Contact Total	4.00		Contact Total	70.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 35.00 Total Student Learning Hours: 105.00

Title 5 Category:	AA Degree Applicable
Grading:	Grade Only
Repeatability:	00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:	
Formerly:	

Catalog Description:
Electronic devices and circuits testing, and laboratory report writing.

Prerequisites/Corequisites:
Not open to students who have completed ELEC 61L. Completion of ELEC 70BL.

Recommended Preparation:

Limits on Enrollment:

Schedule of Classes Information:
Description: Linear electronic circuits. Lab exercises for rectification, amplification & oscillating circuits. (Grade Only)
Prerequisites/Corequisites: Not open to students who have completed ELEC 61L. Completion of ELEC 70BL.
Recommended:
Limits on Enrollment:
Transfer Credit: CSU;
Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	**Area**			Effective:	Inactive:
CSU GE:	**Transfer Area**			Effective:	Inactive:
IGETC:	**Transfer Area**			Effective:	Inactive:
CSU Transfer:	Transferable	Effective:	Fall 1981	Inactive:	Spring 2010
UC Transfer:		Effective:		Inactive:	

CID:

Certificate/Major Applicable:
Certificate Applicable Course

COURSE CONTENT

Outcomes and Objectives:
The student should be able to:
1. assemble basic electronic circuits and make AC and DC measurements with an oscilloscope, VTVM, and VOM.
2. analyze the performance of these fundamental circuits and present these findings in the foray of a standardized laboratory report.
3. prepare graphs from measurement data to illustrate the performance of specific circuits.

Topics and Scope:

1. Diode action (semiconductor)--half and full wave.
2. Rectification.
3. Filter action (L, T, and pi types) with bridge.
4. Rectifier.
5. Transistor characteristics.
6. DC biasing of transistors.
7. Common emitter amplifiers.
8. DC and AC analysis of base biased C-E amp.
9. C-E amp with voltage divider bias divider.

Assignment:

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments are more appropriate for this course.	Writing 0 - 0%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Lab reports	Problem solving 0 - 0%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

HANDS-ON LAB TEST	Skill Demonstrations 10 - 25%

Exams: All forms of formal testing, other than skill performance exams.

None	Exams 0 - 0%

Other: Includes any assessment tools that do not logically fit into the above categories.

None	Other Category 0 - 0%

Representative Textbooks and Materials:
Lab assignments provided by Electronics Department.